

Amendments to the Claims:

Please amend claims 1 and 36, add new claim 77, and cancel claims 6-16, 26-27, 30, 32-35, 37-42, 46-48 and 50-76. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An isolated polynucleotide encoding a CGX 2 polypeptide selected from the group consisting of:
 - (a) a CGX 2 polypeptide comprising the amino acid sequence of SEQ ID NO: 12;
 - (b) a CGX 2 polypeptide that has at least 95% identity to the amino acid sequence of SEQ ID NO: 12 that ~~has a cell-proliferative activity~~ promotes cell proliferation and binds to at least one protein selected from the group consisting of MGC10334 and CENPC1; and
 - (c) a CGX 2 polypeptide encoded by a polynucleotide that hybridizes under stringent conditions to a complement of the nucleotide sequence of SEQ ID NO: 11, wherein the polypeptide ~~has a cell-proliferative activity~~ promotes cell proliferation and binds to at least one protein selected from the group consisting of MGC10334 and CENPC1, wherein the stringent conditions are hybridization in a high salt buffer comprising 6X SSC, 50 mM Tris-HCl (pH 7.5), 1 mM EDTA, 0.02% PVP, 0.02% Ficoll, 0.02% BSA, and 500 mg/ml denatured salmon sperm DNA at 65°C and the hybridization is followed by washes in 0.2X SSC, 0.01% BSA at 50°C.
2. (Canceled)
3. (Previously Presented) A vector comprising the polynucleotide of claim 1.
4. (Previously Presented) A host cell harboring the polynucleotide of claim 1.

5. (Withdrawn) A method for producing the polypeptide of claim 1, said method comprising the steps of: (a) culturing the host cell of claim 4; (b) allowing the host cell to express the polypeptide; and (c) collecting the expressed polypeptide.

6-16. (Canceled)

17. (Withdrawn) A method of diagnosing colon cancer or a predisposition to developing colon cancer in a subject, comprising determining an expression level of a CGX 2 polynucleotide of claim 1 in a patient derived biological sample, wherein an increase of said level compared to a normal control level of said gene indicates that said subject suffers from or is at risk of developing colon cancer.

18. (Withdrawn) The method of claim 17, wherein said increase is at least 10% greater than said normal control level.

19. (Withdrawn) The method of claim 17, wherein said method further comprises determining said expression level of a plurality of colon cancer-associated genes.

20. (Withdrawn) The method of claim 17, wherein the expression level is determined by any one method select from group consisting of: (a) detecting the mRNA of the colon cancer--associated genes, (b) detecting the protein encoded by the colon cancer--associated genes, and (c) detecting the biological activity of the protein encoded by the colon cancer-associated genes,

21. (Withdrawn) The method of claim 17, wherein said expression level is determined by detecting hybridization of a colon cancer-associated gene probe to a gene transcript of said patient-derived biological sample.

22. (Withdrawn) The method of claim 21, wherein said hybridization step is carried out on a DNA array.

23. (Withdrawn) The method of claim 17, wherein said biological sample comprises an mucosal cell.

24. (Withdrawn) The method of claim 17, wherein said biological sample comprises a tumor cell.

25. (Withdrawn) The method of claim 17, wherein said biological sample comprises a colon cancer cell.

26-27. (Canceled)

28. (Withdrawn—Currently Amended) A method of screening for a compound for treating ~~or preventing~~ colon cancer, said method comprising the steps of: a) contacting a candidate compound with a cell expressing a CGX 2 polynucleotide of claim 1; and b) selecting a compound that reduces the expression level of the CGX 2 polynucleotide.

29. (Withdrawn) The method of claim 28, wherein said test cell comprises a colon cancer cell.

30. (Canceled)

31. (Withdrawn—Currently Amended) A method of screening for compound for treating ~~or preventing~~ colon cancer, said method comprising the steps of: a) contacting a candidate compound with a cell into which a vector comprising the transcriptional regulatory region of a CGX 2 polynucleotide of claim 1 and a reporter gene that is expressed under the control of the transcriptional regulatory region has been introduced, b) measuring the activity of said reporter gene; and c) selecting a compound that reduces the expression level of said reporter gene as compared to a control.

32-35. (Canceled)

36. (Currently Amended) A kit comprising a detection reagent which binds to a CGX 2 polynucleotide of claim 1.

37-42. (Canceled)

43. (Withdrawn—Currently Amended) A method of treating ~~or preventing~~ colon cancer in a subject comprising administering to said subject a pharmaceutically effective amount of a vaccine comprising a a polynucleotide of claim 1 encoding a CGX 2 polypeptide or an immunologically active fragment of said polypeptide.

44. (Withdrawn) A method for inducing an anti tumor immunity, said method comprising the step of introducing a polynucleotide of claim 1 encoding a CGX 2 polypeptide or a vector comprising the polynucleotide to antigen presenting cells.

45. (Withdrawn) The method for inducing an anti tumor immunity of claim 44, wherein the method further comprising the step of administering the antigen presenting cells to a subject.

46-48. (Canceled)

49. (Withdrawn—Currently Amended) A composition for treating ~~or preventing~~ colon cancer, said composition comprising a pharmaceutically effective amount of a polynucleotide of claim 1 encoding a CGX 2 polypeptide or an immunologically active fragment of said polypeptide.

50-76. (Canceled)

77. (New) The isolated polynucleotide of claim 1, wherein the polynucleotide encodes a CGX 2 polypeptide comprising the amino acid sequence of SEQ ID NO: 12.